

# इंटरनेट

# मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7726 (1975): Limits of sizes for ISO metric trapezoidal nut threads (diameter range 105 to 300 mm) [PGD 20: Engineering Standards]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard  
LIMITS OF SIZES FOR ISO METRIC  
TRAPEZOIDAL NUT THREADS  
(DIAMETER RANGE 105 TO 300 mm)

**1. Scope** — Specifies the limits of sizes for ISO metric trapezoidal nut threads in the diameter range 105 to 300 mm.

**2. Dimensions** — As given in Table 1, read with Fig. 1.

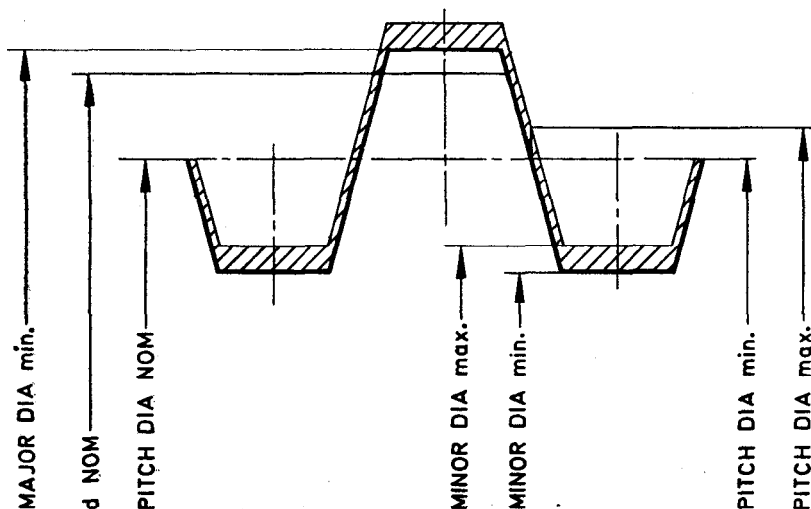


FIG. 1 INTERNAL THREADS WITH TOLERANCE POSITION H

TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS  
( DIAMETER RANGE 105 TO 300 mm )

(Clause 2)

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
105	4	105.500	7H 8H 9H	103.000	103.425 103.530 103.670	4H	101.000	101.375
	12	106.000	7H 8H 9H	99.000	99.670 99.850 100.060	4H	93.000	93.800
	20	107.000	7H 8H 9H	95.000	95.800 96.000 96.250	4H	85.000	86.180
110	4	110.500	7H 8H 9H	108.000	108.425 108.530 108.670	4H	106.000	106.375
	12	111.000	7H 8H 9H	104.000	104.670 104.850 105.060	4H	98.000	98.800
	20	112.000	7H 8H 9H	100.000	100.800 101.000 101.250	4H	90.000	91.180
115	6	116.000	7H 8H 9H	112.000	112.500 112.630 112.800	4H	109.000	109.500
	14	117.000	7H 8H 9H	108.000	108.710 108.900 109.120	4H	101.000	101.900
	22	117.000	7H 8H 9H	104.000	104.850 105.060 105.320	4H	93.000	94.250
120	6	121.000	7H 8H 9H	117.000	117.500 117.630 117.800	4H	114.000	114.500
	14	122.000	7H 8H 9H	113.000	113.710 113.900 114.120	4H	106.000	106.900
	22	122.000	7H 8H 9H	109.000	109.850 110.060 110.320	4H	98.000	99.250
125	6	126.000	7H 8H 9H	122.000	122.500 122.630 122.800	4H	119.000	119.500
	14	127.000	7H 8H 9H	118.000	118.710 118.900 119.120	4H	111.000	111.900
	22	127.000	7H 8H 9H	114.000	114.850 115.060 115.320	4H	103.000	104.250
130	6	131.000	7H 8H 9H	127.000	127.500 127.630 127.800	4H	124.000	124.500
	14	132.000	7H 8H 9H	123.000	123.710 123.900 124.120	4H	116.000	116.900
	22	132.000	7H 8H 9H	119.000	119.850 120.060 120.320	4H	108.000	109.250

(Continued)

TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS  
(DIAMETER RANGE 105 TO 300 mm) — *Contd*

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
135	6	136.000	7H 8H 9H	132.000	132.500 132.630 132.800	4H	129.000	129.500
	14	137.000	7H 8H 9H	128.000	128.710 128.900 129.120	4H	121.000	121.900
	24	137.000	7H 8H 9H	123.000	123.900 124.120 124.400	4H	111.000	112.320
140	6	141.000	7H 8H 9H	137.000	137.500 137.630 137.800	4H	134.000	134.500
	14	142.000	7H 8H 9H	133.000	133.710 133.900 134.120	4H	126.000	126.900
	24	142.000	7H 8H 9H	128.000	128.900 129.120 129.400	4H	116.000	117.320
145	6	146.000	7H 8H 9H	142.000	142.500 142.630 142.800	4H	139.000	139.500
	14	147.000	7H 8H 9H	138.000	138.710 138.900 139.120	4H	131.000	131.900
	24	147.000	7H 8H 9H	133.000	133.900 134.120 134.400	4H	121.000	122.320
150	6	151.000	7H 8H 9H	147.000	147.500 147.630 147.800	4H	144.000	144.500
	16	152.000	7H 8H 9H	142.500	142.730 142.930 143.180	4H	134.000	135.000
	24	152.000	7H 8H 9H	138.000	138.900 139.120 139.400	4H	126.000	127.320
155	6	156.000	7H 8H 9H	152.000	152.500 152.630 152.800	4H	149.000	149.500
	16	157.000	7H 8H 9H	147.000	147.750 147.950 148.180	4H	139.000	140.000
	24	157.000	7H 8H 9H	143.000	143.900 144.120 144.400	4H	131.000	132.320
160	6	161.000	7H 8H 9H	157.000	157.500 157.630 157.800	4H	154.000	154.500
	16	162.000	7H 8H 9H	152.000	152.750 152.950 153.180	4H	144.000	145.000
	28	162.000	7H 8H 9H	146.000	146.950 147.180 147.500	4H	132.000	133.500

(Continued)

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS**  
(DIAMETER RANGE 105 TO 300 mm) — *Contd*

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
165	6	166·000	7H 8H 9H	162·000	162·500 162·630 162·800	4H	159·000	159·500
	16	167·000	7H 8H 9H	157·000	157·750 157·950 158·180	4H	149·000	150·000
	28	167·000	7H 8H 9H	151·000	151·950 152·180 152·500	4H	137·000	138·500
170	6	171·000	7H 8H 9H	167·000	167·500 167·630 167·800	4H	164·000	164·500
	16	172·000	7H 8H 9H	162·000	162·740 162·950 163·180	4H	154·000	155·000
	28	172·000	7H 8H 9H	156·000	156·950 157·180 157·500	4H	142·000	143·500
175	8	176·000	7H 8H 9H	171·000	171·560 171·710 171·900	4H	167·000	167·630
	16	177·000	7H 8H 9H	167·000	167·750 167·950 168·180	4H	159·000	160·000
	28	177·000	7H 8H 9H	161·000	161·950 162·180 162·500	4H	147·000	148·500
180	8	181·000	7H 8H 9H	176·000	176·560 176·710 176·900	4H	172·000	172·630
	18	182·000	7H 8H 9H	171·000	171·800 172·000 172·250	4H	162·000	163·120
	28	182·000	7H 8H 9H	166·000	166·950 167·180 167·500	4H	152·000	153·500
185	8	186·000	7H 8H 9H	181·000	181·600 181·750 181·950	4H	177·000	177·630
	18	187·000	7H 8H 9H	176·000	176·850 177·060 177·320	4H	167·000	168·120
	32	187·000	7H 8H 9H	169·000	170·060 170·320 170·700	4H	153·000	154·600
190	8	191·000	7H 8H 9H	186·000	186·600 186·750 186·950	4H	182·000	182·630
	18	192·000	7H 8H 9H	181·000	181·850 182·060 182·320	4H	172·000	173·120
	32	192·000	7H 8H 9H	174·000	175·060 175·320 175·700	4H	158·000	159·600

(Continued)

**TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS**  
(DIAMETER RANGE 105 TO 300 mm) — *Contd*

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
195	8	196·000	7H 8H 9H	191·000	191·600 191·750 191·950	4H	187·000	187·630
	18	197·000	7H 8H 9H	186·000	186·850 187·060 187·320	4H	177·000	178·120
	32	197·000	7H 8H 9H	179·000	180·060 180·320 180·700	4H	163·000	164·600
200	8	201·000	7H 8H 9H	196·000	196·600 196·750 196·950	4H	192·000	192·630
	18	202·000	7H 8H 9H	191·000	191·850 192·060 192·320	4H	182·000	183·120
	32	202·000	7H 8H 9H	184·000	185·060 185·320 185·700	4H	168·000	169·600
210	8	211·000	7H 8H 9H	206·000	206·600 206·750 206·950	4H	202·000	202·630
	20	212·000	7H 8H 9H	200·000	200·900 201·120 201·400	4H	190·000	191·180
	36	212·000	7H 8H 9H	192·000	193·120 193·400 193·800	4H	174·000	175·600
220	8	221·000	7H 8H 9H	216·000	216·600 216·750 216·950	4H	212·000	212·630
	20	222·000	7H 8H 9H	210·000	210·900 211·120 211·400	4H	200·000	201·180
	36	222·000	7H 8H 9H	202·000	203·120 203·400 203·800	4H	184·000	185·800
230	8	231·000	7H 8H 9H	226·000	226·600 226·750 226·950	4H	222·000	222·630
	20	232·000	7H 8H 9H	220·000	220·900 221·120 221·400	4H	210·000	211·180
	36	232·000	7H 8H 9H	212·000	213·120 213·400 213·800	4H	194·000	195·800
240	8	241·000	7H 8H 9H	236·000	236·600 236·750 236·950	4H	232·000	232·630
	22	242·000	7H 8H 9H	229·000	229·900 230·120 230·400	4H	218·000	219·250
	36	242·000	7H 8H 9H	222·000	223·120 223·400 223·800	4H	204·000	205·800

(Continued)



TABLE 1 LIMITS OF SIZES FOR ISO METRIC TRAPEZOIDAL NUT THREADS  
(DIAMETER RANGE 105 TO 300 mm) — *Contd*

All dimensions in millimetres.

Nominal Diameter <i>d</i>	Pitch <i>P</i>	Major Diameter <i>Min</i>	Pitch Diameter			Minor Diameter		
			Tolerance Class	<i>Min</i>	<i>Max</i>	Tolerance Class	<i>Min</i>	<i>Max</i>
250	12	251·000	7H 8H 9H	244·000	244·710 244·900 245·120	4H	238·000	238·800
	22	252·000	7H 8H 9H	239·000	239·900 240·120 240·400	4H	228·000	229·250
	40	252·000	7H 8H 9H	230·000	231·120 231·400 231·800	4H	210·000	211·900
260	12	261·000	7H 8H 9H	254·000	254·710 254·900 255·120	4H	248·000	248·800
	22	262·000	7H 8H 9H	249·000	249·900 250·120 250·400	4H	238·000	239·250
	40	262·000	7H 8H 9H	240·000	241·120 241·400 241·800	4H	220·000	221·900
270	12	271·000	7H 8H 9H	264·000	264·710 264·900 267·120	4H	258·000	258·800
	24	272·000	7H 8H 9H	258·000	258·950 259·180 259·500	4H	246·000	247·320
	40	272·000	7H 8H 9H	250·000	251·120 251·400 251·800	4H	230·000	231·900
280	12	281·000	7H 8H 9H	274·000	274·710 274·900 275·120	4H	268·000	268·800
	24	282·000	7H 8H 9H	268·000	268·950 269·180 269·500	4H	256·000	257·320
	40	282·000	7H 8H 9H	260·000	261·120 261·400 261·800	4H	240·000	241·900
290	12	291·000	7H 8H 9H	284·000	284·710 284·900 285·120	4H	278·000	278·800
	24	292·000	7H 8H 9H	278·000	278·950 279·180 279·500	4H	266·000	267·320
	44	292·000	7H 8H 9H	268·000	269·250 269·500 269·900	4H	246·000	248·000
300	12	301·000	7H 8H 9H	294·000	294·710 294·900 295·120	4H	288·000	288·800
	24	302·000	7H 8H 9H	288·000	288·950 289·180 289·500	4H	276·000	277·320
	44	302·000	7H 8H 9H	278·000	279·250 279·500 279·900	4H	256·000	258·000

## EXPLANATORY NOTE

This standard is based on DIN 103 Blatt 6 (October 1972) Metrisches ISO-Trapezgewinde Grenzmasse für Muttergewinde Von 105 bis 300 mm Nenndurchmesser (ISO metric trapezoidal internal screw threads from 105 to 300 mm diameter; Limits of sizes), issued by Deutscher Normenausschuss. This standard is one of a series of Indian standards being prepared on ISO metric trapezoidal screw threads. The other standards published so far in the series are:

- IS : 7008 (Part I)-1973 ISO metric trapezoidal screw threads: Part I Basic and design profiles
- IS : 7008 (Part II)-1973 ISO metric trapezoidal screw threads: Part II Pitch diameter combinations
- IS : 7008 (Part III)-1973 ISO metric trapezoidal screw threads: Part III Basic dimensions for design profiles
- IS : 7008 (Part IV)-1973 ISO metric trapezoidal screw threads: Part IV Tolerancing system
- IS : 7684-1975 Limits of sizes for ISO metric trapezoidal nut threads (diameter range 8 to 100 mm)
- IS : 7685-1975 Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 8 to 100 mm)
- IS : 7727-1975 Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 105 to 300 mm)

**AMENDMENT NO. 1    AUGUST 2004**  
**TO**  
**IS 7726 : 1975    LIMITS OF SIZES FOR**  
**ISO METRIC TRAPEZOIDAL NUT THREADS**  
**(DIAMETER RANGE 105 TO 300 mm)**

( Page 7, *Explanatory Note* ) — Substitute the following for the existing:

**‘EXPLANATORY NOTE**

This standard is based on DIN 103 Blatt 6 (October 1972) *Metrisches ISO – Trapezgewinde, Grenzmasse für Muttergewinde von 105 bis 300 mm Nenndurchmesser* (ISO metric trapezoidal screw threads; Limits of sizes for internal screw threads from 105 to 300 mm diameter, issued by Deutscher Normenausschuss (DNA). This standard is one of a series of Indian Standards on ISO metric trapezoidal screw threads. The other standards published so far in the series are:

IS 7008 (Part 1) : 1999/ ISO 2901 : 1993	ISO metric trapezoidal screw threads : Part 1 Basic profile and maximum material profile ( <i>second revision</i> )
IS 7008 (Part 2) : 1988/ ISO 2902 : 1977	ISO metric trapezoidal screw threads : Part 2 Pitch diameter combinations ( <i>first revision</i> )
IS 7008 (Part 3) : 1988/ ISO 2904 : 1977	ISO metric trapezoidal screw threads : Part 3 Basic dimensions ( <i>first revision</i> )
IS 7008 (Part 4) : 1999/ ISO 2903 : 1993	ISO metric trapezoidal screw threads : Part 4 Tolerances ( <i>second revision</i> )
IS 7684 : 1975	Limits of sizes for ISO metric trapezoidal nut threads (diameter range 8 to 100 mm)
IS 7685 : 1975	Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 8 to 100 mm)
IS 7727 : 1975	Limits of sizes for ISO metric trapezoidal bolt threads (diameter range 105 to 300 mm)'